



## Nissan 04-07 Titan 3" Suspension Kit

Thank you for choosing Rough Country for all your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the parts list on the last page. Be sure you have all needed parts and know where they go. Also please review the tool list and make sure you have the necessary tools to install the kit.

### PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is, the easier it will roll. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll-bar and cage system. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

We will be happy to answer any questions concerning the design, function, and correct use of our products.

This suspension system was developed using a **33X12.50/17**, tire with factory wheels. The lift was designed as a leveling kit only.

### NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with any Rough Country product should have a "Warning to Driver" decal installed on the inside of the windshield or on the vehicle's dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - it is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.

#### Kit Contents:

- 2-Front Strut Extensions
- 1-Driver Side Control Arm
- 1-Pass Side Control Arm

#### 1-3/8" Bag containing:

- 6-3/8" x 1 1/2" studs
- 6-3/8" Nuts
- 6-3/8" Lock Washers

#### 1-862 Bag containing:

- 2-3/8" nuts
- 2-cotter pins
- 8-Control Arm Bushings
- 4-Control Arm Sleeves
- 2-Ball Joints
- 4-Ball Joint Spacers
- 8-5/16" x 1" ball joint bolts
- 8-5/16" ball joint nuts
- 4-Grease fittings

#### Tools Needed:

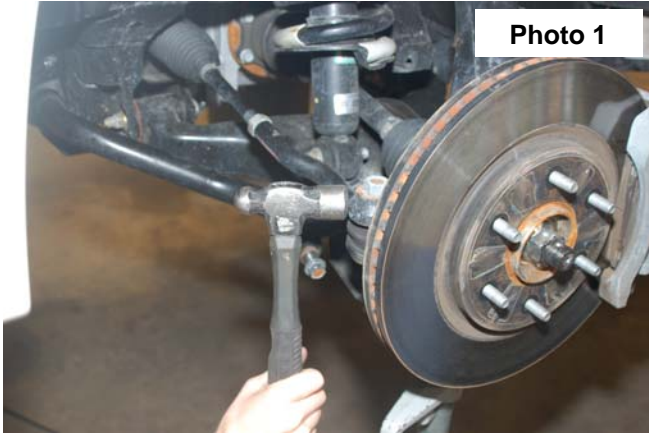
- 19 mm Socket
- 13/16" Socket
- 22 mm Socket
- Hammer
- 17 mm Wrench
- 14 mm Socket
- 19 mm Wrench

#### Torque Specs:

Size	Grade 5	Grade 8
5/16"	15 ft/lbs	20 ft/lbs
3/8"	30 ft/lbs	35 ft/lbs
9/16"	95 ft/lbs	130 ft/lbs
5/8"	135 ft/lbs	175 ft/lbs
3/4"	185 ft/lbs	280 ft/lbs
	Class 8.8	Class 10.9
10MM	32ft/lbs	45ft/lbs
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

## INSTALLATION INSTRUCTIONS

1. Jack up the front of the vehicle and support the vehicle with jack stands, so that the front wheels are off the ground
2. Using 13/16" socket remove the front tires/wheels.
3. Using 22mm socket remove the nut from the steering linkage. Using a hammer hit on the side of the knuckle as shown, and remove the linkage from the knuckle. Push linkage forward to make room for installation. Retain factory hardware **See Photo 1.**
4. Using a 17mm wrench, remove the sway bar bolts, allowing the sway bar to drop. Retain factory hardware. **See Photo 2.**



5. Using a 14mm socket, remove the strut nuts on the upper strut tower that holds the assembly in place. **See Photo 3.** One nut can be left on the upper bolts to hold the strut in place .
6. Remove cotter pin from the upper control arm ball joint nut. Place jack stand under the knuckle for support. Using 22 mm socket remove nut. Using a hammer hit the knuckle as shown to allow the ball joint to separate from the upper control arm **See Photo 4.** Do not allow the knuckle to pull out far enough that it pulls the shaft out of the differential.



7. Using a 19mm socket and wrench, remove the strut bolt from the lower control arm and remove the strut assembly from the vehicle. Retain the factory lower bolt for reassembly. Note the direction of the bolt for reassembly. **See Photo 5.**
8. Remove the upper control arm as shown in **Photo 6** using a 19mm wrench. Retain the factory hardware for reuse.



9. Install the supplied bushings /sleeves in the new upper control arm.
10. Install the ball joint in the upper control arm as shown in **Photo 7** with the supplied 5/16" X 1" bolts / nuts. Tighten using a 1/2" wrench. Install the supplied grease fittings in the control arms.
11. Install the control arms in the factory location with the grease fittings down and the offset eye rings to the top with the factory hardware. **See Photo 8**. Do not tighten at this time.



**Photo 7**



**Photo 8**

12. Locate the supplied 3/8" stud extensions. Using a 9/16" socket snug self clinching stud in the new spacer as shown in **Photo 9**. **The stud should clinch with about 35-45 ft/lbs of torque. Do not over torque the nut.**
13. Install the new strut spacer on the strut using factory hardware and a 14mm wrench. **See Photo 10**.



**Photo 9**



**Photo 10**

14. Install the strut assembly into the strut tower and secure with the supplied 3/8" nuts & lock washers. Tighten using a 9/16 wrench. **See Photo 11**.
15. Install the lower strut bolt in the original position that it was removed. Torque to factory specs using a 19mm wrench.
16. On some vehicles it may be necessary to trim the upper strut tower to allow clearance for the ball joint. To check, pull down the control arm to check if the ball joint can pass the upper strut tower. If not grind the upper strut tower to allow for the arm / ball joint to pass the tower. **See Photo 12**.



**Photo 11**



**Photo 12**

17. Using a floor jack, raise the lower control arm and connect the upper ball joint on the upper control arm to the spindle. Install the supplied spacer as shown in **Photo 13** and tighten castle nut. Install the cotter pin. Using a 22mm socket reinstall the steering linkage nut and cotter pin. **Note: Due to factory differences in the knuckle ball joint mounting surface thickness, two spacers may be needed to ensure proper cotter pin engagement on the castle nut. Two spacers are shown in Photo 13.**
18. Repeat steps 3-17 on opposite side of vehicle.
19. Install the wheels / tires. Jack up the vehicle and remove the jack stands. Lower the vehicle to the floor and torque all bolts to factory specifications including upper control arms.
20. After the vehicle has been lowered to the ground and using 17 mm wrench, reinstall sway bar links using factory hardware. Torque to factory specs.

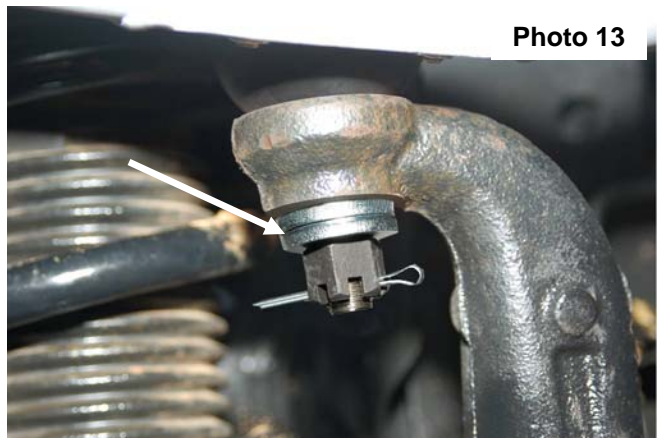


Photo 13

### Post Installation

1. Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.
2. Perform steering sweep. The distance between the tire sidewall and the brake hose must be checked closely. Cycle the steering from full turn to full turn to check for clearance. Failure to perform inspections may result in component failure.
3. Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
4. Readjust headlights to proper settings.
5. Vehicle will have to have a front-end alignment.

Alignment specs.	Caster	1.6 to 3.1 degree
	Camber -	3- to 1.2 degree
	Toe .....	00 to .05
	Total Toe	.05 to .10 degree

### KIT CONTENTS



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